



*"Every User
Is a Booster"*

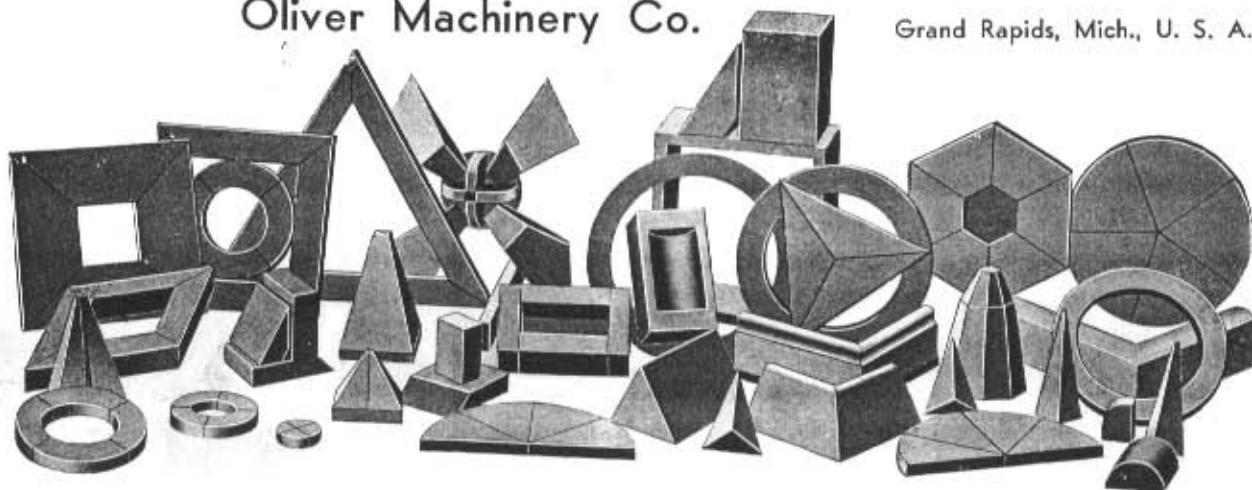
"Oliver" Wood Trimmers

The Most Complete Line of Pattern Shop
Wood Trimmers in the World

Manufactured by

Oliver Machinery Co.

Grand Rapids, Mich., U. S. A.



Specimens of work done on "Oliver" Wood Trimmers.

"Oliver" Trimmer Joints Stay Glued

The utility of "Oliver" Wood Trimmers in pattern shops and other fine wood working plants is universally recognized. They are great money savers; no pattern shop should be without "Oliver" Wood Trimmers.

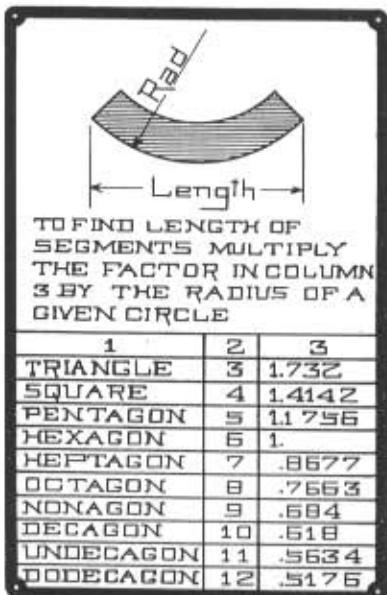
These trimmers are adjusted to cut square, vertically and horizontally, and warranted to read absolutely true to their graduations. The correct position

of each graduation for the triangle, miter, hexagon, octagon, and square upon both the obtuse and acute angles is determined by actually fitting three pieces of wood together for the triangle, four for the miter, six for the hexagon, eight for the octagon, etc. When the joints on these come absolutely perfect, the hole is reamed in the bed into which the spring plunger fits and thus the angle is located positively and accurately.

CODE, CAPACITY, WEIGHT, ETC.

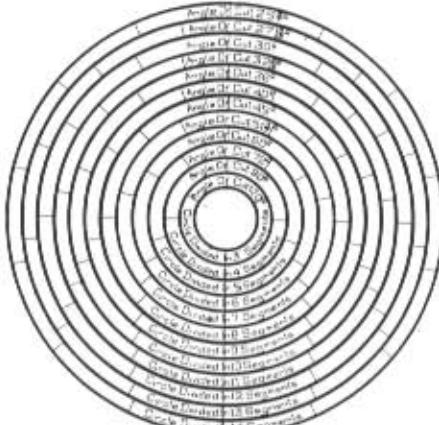
Code	Machine
Fasting	No. 3 —Universal Trimmer
Femur	No. 9-A—For Bench
Fen	No. 9-B—With Column

Length of Stroke Inches	Depth of Cut Inches	Trimming Area Sq. Inches	Domestic Weight Pounds	Foreign Weight Pounds	Measure Cable Feet
20 $\frac{3}{4}$	7 $\frac{1}{2}$	135	725	900	29
8 $\frac{1}{2}$	4 $\frac{3}{4}$	25	105	115	3
8 $\frac{1}{2}$	4 $\frac{3}{4}$	25	250	350	12

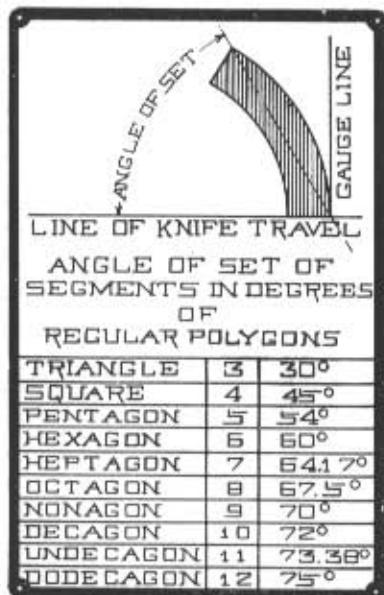


Length of Segments

We aim to serve our Wood Trimmer users in every sense of the word. We supply one of these circular diagrams drawn to a larger scale with each Trimmer sold; one each of the other two diagrams with each Universal Trimmer.



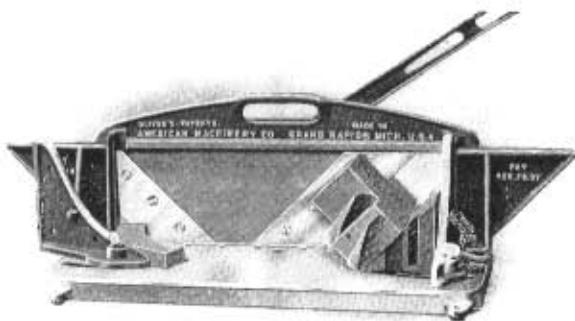
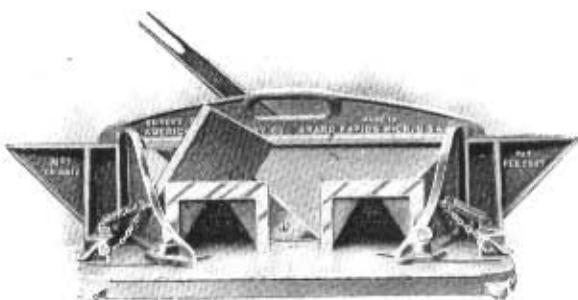
Angle of Cut of Segments



Angle of Set of Segments

OLIVER MACHINERY COMPANY GRAND RAPIDS, MICHIGAN, U.S.A.

TRIANGLE GAUGES FOR "OLIVER" WOOD TRIMMERS

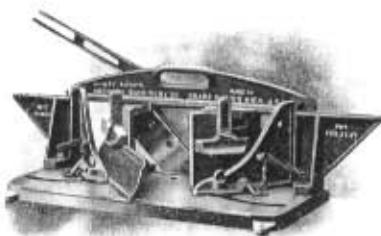


Triangle Gauges

These are furnished with our wood trimmers when they are called for. There are many who never use them so their cost in such cases is deducted from the price of the machine.

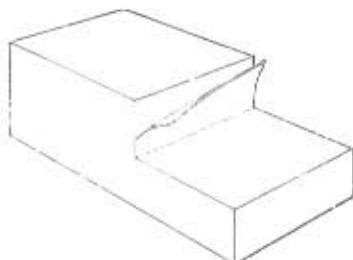
Uses and Advantages

We have found them desirable in working tenons, half laps, wide miters, compound angles, etc. A workman will often find other special things in his particular work in doing which these attachments enable him to save time and trouble.



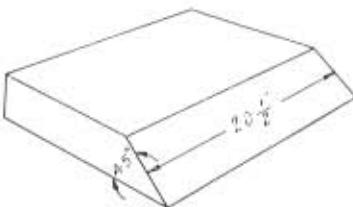
Tenons and Half Laps

To trim the square shoulder of a tenon or half lap, place the attachment (as shown) against the gauge, located at 90 degrees. The lower corner of the wood must then rest on the bed of the Trimmer. If the shoulder is not desired to be square the knife can be brought to bear at any angle by adjusting the wood upon the face of the Triangle Gauge.



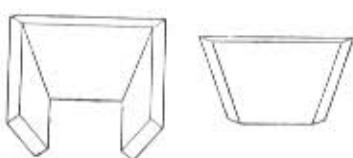
Wide Miters

In order to trim a miter the length of the cut, utilize the attachments similarly to those illustrated, but with the gauges still located at the square. Small tongues on the triangles fit into a groove adjacent to the knives to keep them in position, consequently no screws are required.



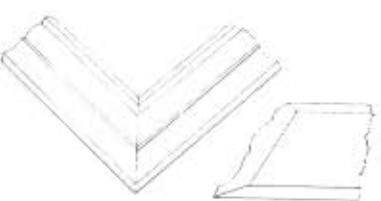
Compound Angles

When a piece must be made to the shape of a hopper, a compound angle must be trimmed. This can be accomplished as illustrated, one of the angles being 45 degrees. The degree of pitch is determined by the regular gauge for one angle and the triangle for the other.



Crown Moulding

If set on end, the attachments slide in the groove to and from the regular gauge. Set the latter at 45 degrees (if the mould is to be trimmed on the miter) and the cant of the moulding will then indicate the position of the triangle. Secure the latter at the back by the screw provided, which fits any of the tapped holes; adjust the teepiece; pull the lever, and a perfect compound miter will be obtained.



OLIVER MACHINERY COMPANY

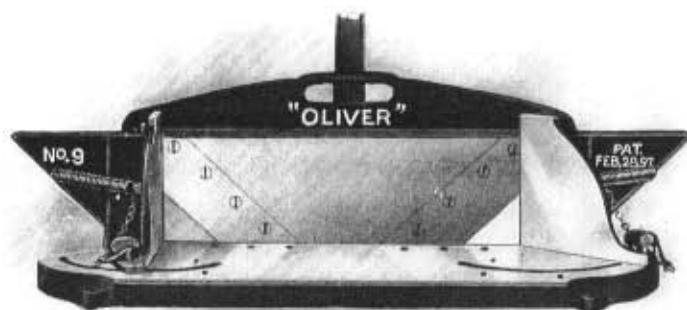


GRAND RAPIDS, MICHIGAN, U.S.A.

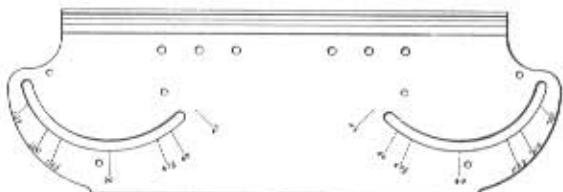
NO. 9 "OLIVER" NEW STYLE WOOD TRIMMER

Capacity

Will trim any angles from 45 to 135 degrees, has depth of cut $4\frac{3}{4}$ inches, length of stroke $8\frac{1}{2}$ inches, and superficial cutting area of 25 square inches.



No. 9-A "Oliver" New Style Wood Trimmer.
For mounting on a bench.



No. 9 Wood Trimmer. 45 to 135 degrees.

Bed

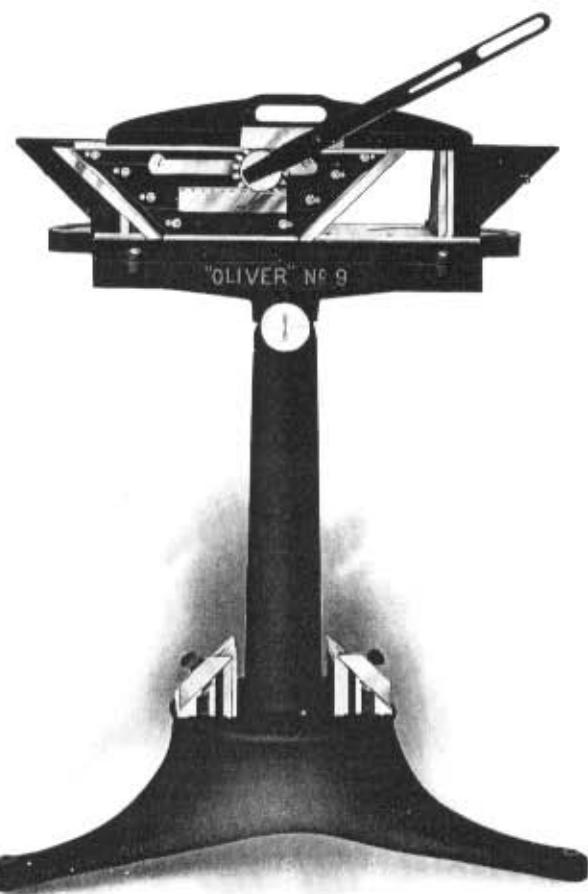
This is one solid casting, $10\frac{3}{4}$ inches x 26 inches long, heavily ribbed for rigidity, and graduated at each end on 45, 60, 67, 90, $112\frac{1}{2}$, 135 degree lines.

Knife Carriage

This carries two sets of bolt holes to allow the knives to be moved forward, doubling their usefulness. All sliding parts are milled and scraped.

Knives

Made of special steel purposely ground slightly concave. Always sharpen on the beveled side only.



No. 9-B "Oliver" New Style Wood Trimmer.
Mounted on a Column.

Gauges

They rest flatly on the bed; are held back by springs, are easily clamped at any angle; may be accurately located by taper pins at the principal angles—45, 90, 135 degrees and move through angular paths whose centers are exactly in lines formed by points of the gauges with the cutting edge of the knives.

Driving Mechanism

A malleable iron lever turns a pinion with cut teeth which meshes into steel cut racks—upper one fastened back of frame, lower one fastened to knife carriage out of the way of shavings.

CODE, WEIGHT, ETC.—SEE FRONT COVER

Design

Great thought and care in designing this wonderful machine resulted in the introduction of new and valuable features that give it a unique place in the pattern shop. Correct proportions insure strength and rigidity. Up-to-date ideas in construction and perfect workmanship establish the unqualified merit of this tool.

Capacity

We have shown some etchings that indicate the great capacity of the Trimmer. This range gives the tool its value in squaring core-boxes, mitering architraves and other large work. A bright workman will find many uses for the machine that we cannot enumerate here. The maximum stroke is $20\frac{3}{4}$ inches long and $7\frac{1}{2}$ inches deep, giving a superficial area of 135 square inches.

Bed

This is 34 inches long, 18 inches wide and is made to swivel on its supporting column for convenience in shop location. The graduations cover degrees from 30 to 135 on each side of the bed. Additional graduations are shown for use in fitting segments for circular patterns. Four, six, eight or twelve segments to circles from 6 to 72 inches diameter can be instantly and accurately jointed by using the auxiliary stop gauges.

Gauges

These are automatically located at the principal angles, i. e., 30, 45, 60, $67\frac{1}{2}$, 90, $112\frac{1}{2}$, 120 and 135 degrees. The etching shows this is effected by a spring that forces a tapered pin into a tapered hole. Accuracy and speed are thus obtained. The gauges can be set at any of the intervening degrees by means of a thumb screw or clamp.

Adjustable Bearings

By the etchings is shown that adjustment for wear in the sliding knife head. The long taper gib is beveled in breadth so that operating the screw takes up the wear both

vertically and laterally. It means a tight bearing all over and accuracy in trimming indefinitely. This is a patent feature found only on the "Oliver" Trimmers.

Pilot Wheel

For operating the sliding knives, we furnish a six spoke wheel so that a down stroke is always obtainable. Convenience and power are its chief characteristics.

Gear and Rack

The gear rack and working parts are protected from dirt and chips, insuring ease in operation at all times. The gear and rack are of steel and with cut teeth.

Automatic Knife Guards

These guards protect the knives on both sides whenever they pass beyond the frame. When the knives do not thus project, the guards close up to the machine, thus avoiding both breaking and wasting shop room.

Auxiliary Gauge Stop

We supply this for use in trimming any number of pieces to exactly the same length, the ends of segments may be trimmed and perfect joints in them made by this same attachment.

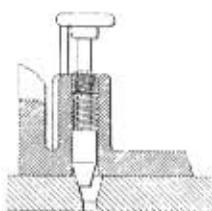
Triangle Gauges

We furnish these attachments when wanted. Compound angles for sprung moldings, mitered corners, truing tenon and rabbet shoulders, etc., can be accomplished by their use.

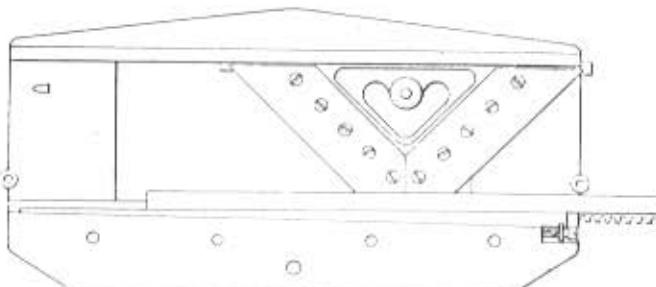
Knives

The character of the knives used in a Wood Trimmer is of the utmost importance. Those we furnish are subjected to the closest scrutiny as to material, temper, grinding and finish, and it is a well established fact that the Oliver Knives outlast those of any other make. Knives are warranted. Two series of bolt holes are located to set knives forward when worn, thus doubling their cutting capacity.

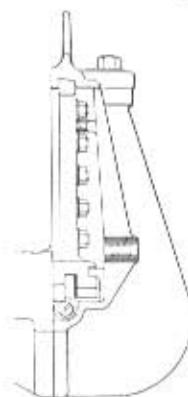
OVER 2,500 IN USE



Taper Pin Instantly locates the Gauges at any Principal Angle.

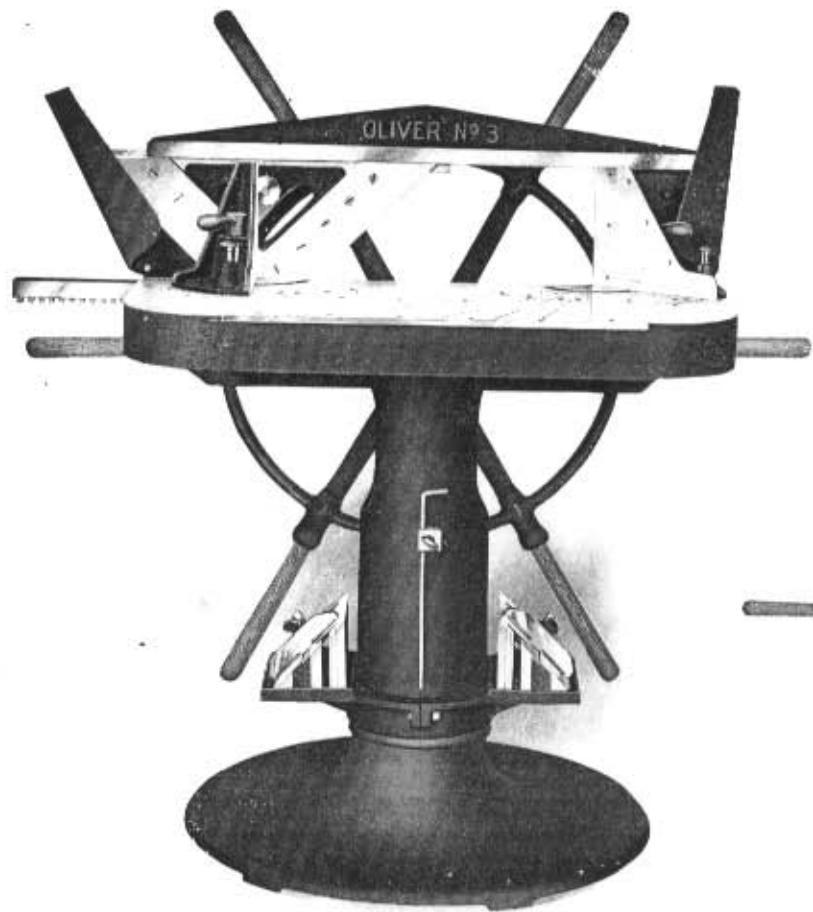


Showing Taper Gib and Screw take up for wear in knife slide.

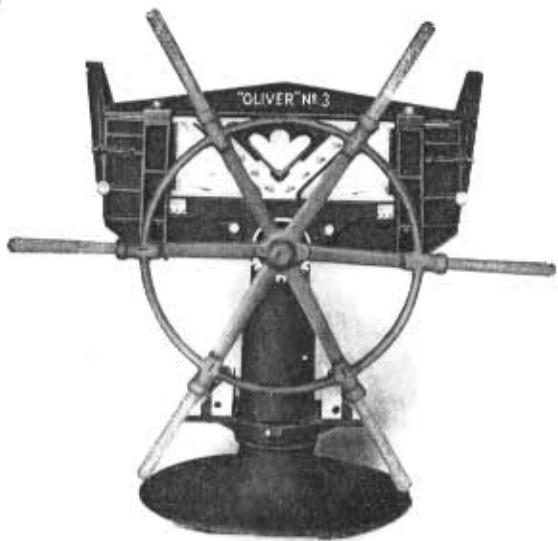


OLIVER MACHINERY COMPANY GRAND RAPIDS, MICHIGAN, U.S.A.

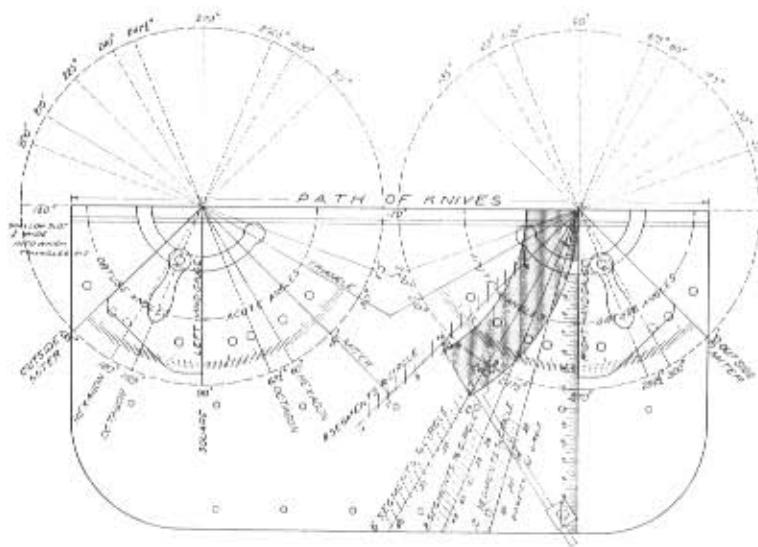
N.O. 3 "OLIVER" UNIVERSAL WOOD TRIMMER



Front View of No. 3 "Oliver" Universal Wood Trimmer.



Rear View — No. 3 Universal Wood Trimmer.



CODE, WEIGHT, ETC.—SEE FRONT COVER

No Pattern Shop is
Complete Without
an "Oliver" Trimmer

This etching illustrates how the beds of our full Universal Trimmers are graduated. The gauges cover degrees from 30 to 135 degrees on each side of the bed.

The reason for two gauges is that the one on the right covers one-half the degrees in a circle, and the one on the left the other half.

The additional graduations shown are for use in connection with circular pattern work. Four, six, eight or twelve segments to circles of from 6 inches to 72 inches in diameter can be instantly and accurately jointed by using the auxiliary stop-gauges.

The shading represents one of six segments to a 24-inch circle properly adjusted. Trim one end first, then turn end for end, and finish to graduation mark.



"Oliver" No. 18-A Wood Turning Lathe designed and built on special order for the U. S. Government.

Index of "Oliver" Pattern Shop Equipment

In 1890 the Oliver Machinery Company first produced a line of wood trimmers designed especially for pattern shops. Other machines for pattern shops were added until Oliver produced the most comprehensive line of woodworking machinery for pattern shops built . . . a line that includes full size machines, and also junior size machines for small work. During these 53 years "Oliver" equipment has earned for its makers a leading position in its

field. And this position will be maintained by constantly improving the design of its machines as well as designing new ones. The entire line of "Oliver" machines for pattern shops is indexed below. Detailed descriptive literature covering any machine that interests you will be cheerfully furnished. In asking for information be sure to outline the characteristics of the electric current available for power.

Band Sawing Machines

Full line from 38-inch to 18-inch. Also Saw Blades, Electric Band Saw Brazers, Rubber Bands, Saw Filers, Setters, etc.

Boring Machines

Heavy, Medium and Portable Borers. Also Bits and Cutters for Borers.

Benches, Tables

Iron Surface Tables, Pattern Makers' Benches, Cabinet Makers' Benches.

Circular Sawing Machinery

Circular Saw Fitting Tools, Cut-Off Saws, Rip Saws, Saw Blades, Dados, Straight Line Cut-Off Saws, Swing Saws, Tilting Arbor Saw Benches, Variety Saw Benches, Universal Double Arbor Saws.

Clamps

Adjustable Screw Clamps and General Purpose Clamps. Hand Screws.

Glue Machines

Electric Glue Cookers, Electric Glue Pots.

Grinders

Knife Grinders, Motor Head Grinders, Revolving Oilstone Tool Grinders.

Hand Planers and Jointers

Sizes from Heaviest 36-inch Pattern Makers' Jointer to 6-inch Portable Jointer. Cutter Heads and Knives. Jointer Guards.

Jig Sawing Machines

Self-Contained Jig or Scroll Saws.

Lathes

The most complete line of Pattern Shop Lathes built. Motor Headstock, Pattern Makers' Lathes from 16-inch to 30-inch. Speed Lathes from 8-inch to 12-inch. Woodturning Lathes from 32-inch to 96-inch. Gap Lathes, Face Lathes, etc.

Milling Machines

Full line of Pattern Milling Machines for wood and light metals.

Mortisers

Hollow Chisel Type. Bits, Chisels, etc.

Pattern Shop Supplies

Core Box Plane, Pinch Dogs, Glue Pots, Hand Screws, Screw Clamps, Oilstones, Dowels, Rapping Plates, etc.

Planers

Double Surfacing, Facing Planers, Single Surfacing, Cutter Heads, Knives, etc.

Routers

Pattern Rout-or-Borer. Router Bits.

Sanders

Belt Sanders, Disk Sanders, Spindle Sanders, Drum Sanders, and various combinations of these.

Shapers

Double and Single Spindle. Cutters, Steel, etc.

Trimmers

Wood Trimmers — full line.

Type Embossing Press

Large line, many sizes. Embossing Tape for the presses.

Vises

Pattern Makers' and Woodworkers' Vises.



Designers of Woodworking Machines for Pattern Shops Since 1890